Claims

What is claimed is:

Sub a1> 1. A tilter for adjustably mounting a device to a support mount, said tilter comprising:

a support block coupled to and configured to pivotally engage the support mount around a first axis;

a center tilt mount coupled to and configured to pivotally engage said support block around a second axis, wherein the second axis is perpendicular to the first axis; and

an adapter plate configured to attach to the device.

2. The tilter according to claim 1, further comprising a rotating plate configured to be secured to said adapter plate and to be rotatably secured to said center tilt mount so as to permit pivotal rotation of said adapter plate relative to said center tilt mount around a third axis, wherein the third axis is perpendicular to the second axis.

3. The tilter according to claim 2, wherein said rotating plate is rotatably secured to said center tilt mount by a rivet.

4. The tilter according to claim 2, wherein said rotating plate has a first plurality of holes formed therein and said adapter plate has a second plurality of holes formed therein that

is aligned with said first plurality of holes, said aligned holes configured to receive a plurality of fasteners so as to secure said adapter plate to said rotating plate.

5. The tilter according to claim 1, wherein said center tilt mount has a first plurality of holes formed therein and said adapter plate has a second plurality of holes formed therein that is aligned with said first plurality of holes, said aligned holes configured to receive a plurality of fasteners so as to secure said adapter plate to said center tilt mount.

6. The tilter according to claim 1, wherein said center tilt mount includes a first opening formed therein, and said support block has a second opening formed therein that aligns with said first opening.

7. The tilter according to claim 6, further comprising a tilter shaft configured to fit within said aligned openings of said center tilt mount and said support block so as to pivotally secure said center tilt mount to said support block.

8. The tilter according to claim 7, further comprising a bushing configured to receive said tilter shaft therethrough and configured to be received in said opening of said support block.

9. The tilter according to claim 8, wherein said support block has a threaded hole therein for receiving a set screw, said set screw configured to engage said bushing in said opening of said support block so as to deform said bushing, said deformed bushing frictionally engaging said tilter shaft so as to prevent relative rotation therebetween.

10. The tilter according to claim 1, wherein said tilter shaft has a knurl band located at one end.

11. The tilter according to claim 2, wherein said center tilt mount includes a groove formed on a surface thereof.

12. The tilter according to claim 11, further comprising a washer, said washer configured to be received in said groove on said center tilt mount so as to be interposed between said center tilt mount and said rotating plate.

13. The tilter according to claim 3, wherein said center tilt mount includes a groove formed on a surface thereof.

14. The tilter according to claim 13, wherein said rivet includes a head that contacts said center tilt mount within said groove.

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15. The tilter according to claim 1, wherein said adapter plate includes four holes forming corners of a square having sides of approximately 100 millimeters.

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16. The tilter according to claim 1, wherein said adapter plate includes four holes forming corners of a square having sides of approximately 75 millimeters.

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17. The tilter according to claim 1, wherein said adapter plate includes a first set of four holes forming corners of a first square having sides of approximately 75 millimeters and a second set of four holes forming corners of a second square having sides of approximately 100 millimeters.

Sub A2> 18. The tilter according to claim 1, wherein the device is a flat-screen television.

19. The tilter according to claim 1, wherein the device is a flat-screen computer monitor.

20. The tilter according to claim 1, wherein the device is a keyboard.

21. The tilter according to claim 1, wherein the device is a laptop computer.

22. A tilter for adjustably mounting a device to a support mount, said tilter comprising:

a support block including a shaft and a body, said support shaft disposed within one end of said body and having an axial centerline aligned with a first axis, said support shaft coupled to the support mount and configured to pivotally rotate around the first axis, and said body having a hole formed therein, said body hole having an axial centerline aligned with a second axis that is perpendicular to the first axis;

a center tilt mount having a floor and sidewalls extending therefrom, each said sidewall having a hole formed therein, each said sidewall hole aligned with said other sidewall holes and said body hole;

a tilter shaft coupled to said body hole and said sidewall holes so as to rotatably engage said support block and said center tilt mount so that said center tilt mount can pivotally rotate around the second axis; and

means for connecting the device to said tilter.

19 ~~23~~. The tilter of claim 18 ~~22~~, wherein said means for connecting the device to said tilter is an adapter plate.

Sub A5> 24. The tilter of claim 23, wherein said adapter plate includes a plurality of holes, said plurality of holes form at

least one configuration associated with at least one mounting standard.

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~~25~~. The tilter of claim ~~23~~, wherein said adapter plate is connected to the device with fasteners.

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~~26~~. The tilter of claim ~~25~~, wherein said fasteners are screws.

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~~27~~. The tilter of claim ~~23~~, wherein said center tilt mount includes a plurality of mounting holes formed in said floor and said adapter plate includes a plurality of holes that align with said mounting holes.

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~~28~~. The tilter of claim ~~23~~, wherein said adapter plate is connected to said center tilt mount with fasteners.

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~~29~~. The tilter of claim ~~28~~, wherein said fasteners are screws.

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~~30~~. The tilter of claim ~~22~~, further comprising a rotating plate coupled to said center tilt mount.

Sub A4> 31. The tilter of claim 30, wherein said floor has a hole formed therein, said floor hole having an axial centerline

aligned with a third axis that is perpendicular to the first axis and the second axis, said rotating plate having a hole formed therein that is aligned with said floor hole, and further comprising means for connecting said rotating plate and said center tilt mount.

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~~32~~. The tilter plate of claim ~~31~~ 27, wherein said means for connecting said rotating plate and said center tilt mount is a rivet.

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~~33~~. The tilter of claim ~~32~~, wherein said rivet is inserted through said floor hole and said rotating plate hole.

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~~34~~. The tilter of claim ~~32~~, wherein said rivet includes a head and a shaft, said rivet being inserted through said floor hole and said rotating plate hole so that said rivet head contacts said floor and a portion of said rivet shaft protrudes above said rotating plate hole.

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~~35~~. The tilter of claim ~~34~~, further comprising means for securing said shaft within said rotating plate hole.

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~~36~~. The tilter of claim ~~34~~, wherein said portion of said rivet shaft protruding above said rotating plate hole is deformed, said deformed portion having a diameter larger than a

tilt mount includes an indented region formed on a surface thereof and further comprising a washer configured to be received within said indented region so as to be interposed between said center tilt mount and said rotating plate.

39 ~~43~~. The tilter according to claim ~~36~~ 32, wherein said rotating plate includes an indented region and said deformed portion of said rivet shaft contacts said rotating plate within said indented region.

40 ~~44~~. The tilter according to claim ~~22~~ 18, wherein said tilter shaft includes a knurl band insertable into one said sidewall hole so as to form a press fit therebetween.

41 ~~45~~. The tilter according to claim ~~22~~ 18, further comprising a bushing, wherein said tilter shaft is disposed within said bushing and said bushing is disposed through said body hole and said sidewall holes.

42 ~~46~~. The tilter according to claim ~~45~~ 41, wherein said body includes a threaded hole therein, said threaded hole in communication with said body hole and configured to receive a set screw, said set screw configured to engage said bushing so as to deform said bushing, said deformed bushing frictionally engaging said tilter shaft so as to prevent rotation thereabout.

43. 18

47. The tilter according to claim 22, wherein said support shaft includes a knurl band located on a surface thereof, said knurl band forming a press fit between said support shaft and said body.

48. An apparatus for adjustably mounting a device to a support mount, said apparatus comprising

a first end cap coupled to the support mount;

an upper channel coupled to said first end cap;

a lower channel coupled to said first end cap;

a second end cap coupled to said upper channel and said lower channel;

a gas spring coupled to said upper channel and said first end cap;

a forearm extension coupled to said second end cap;

a support block coupled to and configured to pivotally engage said forearm extension around a first axis;

a center tilt mount coupled to and configured to pivotally engage said support block around a second axis, wherein the second axis is perpendicular to the first axis; and

an adapter plate connected to said center tilt mount and configured to attach to the device.

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